REMARKS

In response to the first Office Action contending that claims 1-23 lack support, Applicant cancelled those claims, leaving only claims 24-34. In this Office Action, the Examiner now asserts that claims 25-33 lack support and are not entitled to the benefit of the filing date of the parent application. Applicant traverses this rejection, and asks for reconsideration. The Examiner acknowledges that claims 24 and 34 are entitled to the benefit of the earliest filing date of the parent case, U.S. Serial No. 10/070,531, issued as U.S. Patent No. 6,788,414. It is submitted that the remaining intervening claims 25-31 and 33 are also entitled to the parent case's filing date, which claims the benefit of U.S. Provisional Patent Application Serial No. 60/153,263 filed September 9, 1999. If this is correct, the effective date of all claims is earlier than Doolen U.S. Patent No. 6,462,816 and Doolen cannot be used as a reference to support a *prima facie* case against those claims.

Basically the Examiner is urging that since the claims 25-31 and 32 which relate to averaged peak values, long time drift minimums, average pixels over time, and non-parallel orientation to the first plane (claim 32), are not supported. Applicant has cancelled claim 32 rendering this rejection moot. It is submitted however the other claims are appropriate and have support.

As the Examiner acknowledges in the Office Action (page 2), "There is disclosure in the parent application for "boxcar smoothing" (reproduced in the instant specification paragraph [0130], page 29, 18ines 1-5)." The original application also discloses signal averaging, see for example Figure 2B, paragraph [0081], paragraph [0092], paragraph [0131], and paragraph [0137]. It also goes without saying that compliance with 35 U.S.C. § 112 can come from original claims as well.

In [0092], mathematical smoothing was explicitly stated as a means to reduce the noise. "Boxcar smoothing" is a well known term for adding up all the points (e.g. 25) to produce a running average. While the inventors did not specify here whether the 25 points were in time or whether they refer to pixels covering the same capillary tube, those knowledgeable in the art will have no problems connecting one kind of smoothing with the other. This was known before the filing date.

In [0130], bottom, the inventors refer to time averaging, but they also mentioned "for each data point in the 1024 array". That is, they did not specifically pick out one pixel per capillary, which is apparently the examiner's objection. But this paragraph implies both spatial (pixels) and time smoothing.

In claim 24 it says the output is derived from more than one digital values passing through two photosensitive elements. Even for the description in [0078], determining the "brightest pixel" first is in itself deriving the final value from more than one digital value, showing support.

Keeping in mind the points sent forth in the immediately preceding three paragraphs, the Examiner is reminded that the specification is directed to one skilled in the art, and the issue is whether the invention of the claims is reasonably conveyed to one of skill in the art. As the Federal Circuit said in Ralston Purina Co. v. Far-Mar-Co., Inc., 77 F.2d 1570 (Fed. Cir. 1985), "the test for sufficiency of support in a parent application is whether the disclosure of the application relied upon reasonably conveys to the artisan that the inventor had posession at the time of the later-claimed subject matter.", Id. at 1575. Considering the above referenced disclosure and the original claims, it seems to be undisputed that he did reasonably convey to one skilled in the art. Considering the Examiner's acknowledgment that "boxcar smoothing" is

disclosed, it is well known this refers to adding up all the points (e.g. 25) to produce a running average. This includes not only whether the points were in time or whether they refer to pixels covering the same capillary. Those knowledgeable in the art have no problem connecting one kind of smoothing with the other as of the time of filing.

It is submitted therefore that claims 25-31 and 33 are in fact entitled to the parent application filing date and Doolen is an improper reference. As such the lack of novelty rejection under 35 U.S.C. § 102 over Doolen with respect to claims 25-31 and 33 should be removed.

The Examiner has rejected claims 24 and 34 as anticipated or made obvious over Gilby. However Gilby is an improper anticipation rejection, and as for obviousness over the reference, it has already been overcome in the parent application, now U.S. Patent No. 6,788,414.

In spite of this, the Office contends that it was known in the art that samples in capillary tubes could be tested by measuring absorption, citing Gilby et al. The Office concludes that it would have been obvious to adapt the system of Yeung et al. to measure absorption as allegedly taught by Gilby et al. Yet, nowhere has the Office pointed to a teaching or suggestion to modify the system of Yeung et al. as proposed by the Office for Gilby. Furthermore, adapting the system of Yeung et al. to measure absorption would render the system of Yeung et al. unsuitable for its intended purpose, i.e., to measure fluorescence. See, e.g., In re Gordon et al., 733 F.2d 900, 221 U.S.P.Q. 1125 (C.A.F.C. 1984); In re Fritch, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992); and M.P.E.P. § 2143.01. A system that measures fluorescence requires a different optical geometry from that of a system that measures absorption.

Applicants point out that there must be some teaching or suggestion in the art to modify the Gilby absorbance system to the fluorescence system of Yeung et al. and this negated already since it would render the system of Yeung et al. unsuitable for its intended purposes. Therefore,

the Office's contention can only be characterized as an attempt at impermissible hindsight reconstruction that defies logic.

Reconsideration and allowance of claims 24-31 and 33 and 34 is respectfully requested.

No fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,

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